

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

NEW CINGULAR WIRELESS PCS, LLC
t/a CINGULAR WIRELESS

Plaintiff

vs.

ZONING HEARING BOARD OF WEISENBERG
TOWNSHIP and WEISENBERG TOWNSHIP

Defendants

CIVIL ACTION NO. 06-2932

HENRY S. PERKIN
UNITED STATES MAGISTRATE JUDGE

September 29, 2009

MEMORANDUM OPINION

New Cingular Wireless PCS, LLC, t/a Cingular Wireless (“AT&T Mobility”),¹ is a provider of personal wireless telecommunications services pursuant to licenses issued by the Federal Communications Commission (“FCC”). This litigation involves AT&T Mobility’s efforts to construct a one hundred and eighty-foot (180’) monopole and associated equipment shed on a leased parcel of property known as Bear Farm (“Bear Farm Property”) in Weisenberg Township (“Township”) so as to remedy what AT&T Mobility perceives as a significant gap in cellular services for its customers. AT&T Mobility asserts that the Zoning Hearing Board’s (“ZHB”) denial of its variance application to erect a personal wireless facility in Weisenberg Township resulted in a prohibition of services in violation of 47 U.S.C. §332(c)(7) and is *de facto* exclusionary in violation of Pennsylvania law.

¹ According to the most recent documents submitted by Plaintiff in this matter, we note that New Cingular Wireless PCS, LLC is now known as AT&T Mobility. Accordingly, we will refer to the Plaintiff as AT&T Mobility throughout this Memorandum Opinion.

PROCEDURAL HISTORY²

On November 10, 2004, AT&T Mobility submitted to the ZHB an application seeking zoning relief in the form of a variance in order to erect and operate a monopole telecommunications tower one hundred eighty feet (180') in height, accompanied by an equipment shed, on a leased³ parcel, the Bear Farm Property,⁴ in the Township. (Amended Complaint ¶ 16.) Approximately one year after its application was initially filed, AT&T Mobility amended the application to challenge the validity of the Weisenberg Township Zoning Ordinance (“Ordinance”) on the grounds that it was *de facto* exclusionary in violation of state law and also in violation of the Telecommunications Act of 1996 (“TCA”) by effectively prohibiting the provision of personal wireless services in the Township or substantial parts thereof. (Amended Complaint ¶ 22.)⁵

The ZHB held public hearings on the application on February 9, 2005, April 13, 2005, November 9, 2005, December 14, 2005, January 11, 2006, February 8, 2006, March 8,

² In this section, the Court sets forth a summary of the procedural history concerning AT&T Mobility’s application to the ZHB for zoning variances as well as AT&T Mobility’s appeal to this Court.

³ At trial, counsel for Defendant ZHB moved to dismiss AT&T Mobility’s action pursuant to Rule 52 of the Federal Rules of Civil Procedure on the basis that AT&T Mobility had not proven that a lease existed with the landowner for the subject telecommunications site at Bear Farm. (Notes of Testimony (“N.T.”) 12/11/08 at 101-102.) This Court notes, however, that AT&T Mobility indicated that it had such a lease when it was before the ZHB and Defendants failed to produce any evidence during that proceeding, or during this trial, to the contrary. Moreover, based on the testimony of Susanne Allen, a site acquisition specialist with Velocitel, who testified on behalf of AT&T Mobility that the subject property remains under lease (N.T. 12/09/08 at 160), this Court finds that AT&T Mobility has standing to pursue this action. Further, this Court notes that according to Defendants’ own preliminary proposed findings of fact, Defendants aver that the subject parcel is leased. (Docket Entry 65, ¶ 5.) Based on the foregoing, the Court concludes that Defendant ZHB’s motion is improper and it is, therefore, denied.

⁴ According to the pleadings, the Bear Farm property, which is located at 3323 Blacksmith Road, east of Tannery Road, is a working agricultural farm of approximately fifty-eight (58) acres in area owned by Stewart E. Bear and Rosemary M. Bear. (Amended Complaint ¶ 17.)

⁵ Where reference is made to the Amended Complaint, the averments referred to were either totally or substantially admitted in the Defendants’ Answer.

2006, April 5, 2006, May 10, 2006 and May 31, 2006. (Defendant's Trial Exhibit ("Def. Ex.") D-1, Amended Complaint ¶ 21.) During the public hearings before the ZHB, AT&T Mobility presented testimony and evidence alleging a "gap" in wireless services in an area designated in white on Plaintiff's Hearing Exhibit A-14. See Def. Ex. D-3. AT&T Mobility alleged, as it does here, that within the gap, its customers and customers of all other personal wireless providers are unable to rely on their ability to use wireless phones to connect with the land-based telephone network and maintain a connection capable of supporting reasonably uninterrupted communication. AT&T Mobility also alleged, as it does here, that the proposed monopoly telecommunications tower would be the least intrusive means of filling said gap. (Amended Complaint ¶ 23.)

At its May 31, 2006 public hearing, the ZHB voted to deny all zoning relief requested as part of AT&T Mobility's application. (Def. Ex. D-1.) The ZHB concluded that AT&T Mobility failed to show the requisite criteria for variance relief as required under applicable law, based upon findings of fact that included the Bear Farm Property's current use and operation being in strict conformance with the Ordinance and the absence of unique physical circumstances or conditions of the Bear Farm Property which prohibited it from being developed in conformity with the provisions of the Ordinance, as well as the finding that placement of a telecommunications tower would alter the essential character of the rural neighborhood. (Def. Ex. D-1.) The ZHB also concluded that AT&T Mobility failed to meet its burden in showing that the Ordinance was *de facto* exclusionary as applied to wireless telecommunication facilities, based upon findings of fact that included the Ordinance permitting by special exception communication towers in two zoning districts and not prohibiting or having the effect of

prohibiting personal wireless service throughout the Township. (Def. Ex. D-1.) In addition, the ZHB concluded that AT&T Mobility failed to meet its burden in proving that the Ordinance violated the TCA, based upon its findings that AT&T Mobility's evidence and testimony failed to identify to what extent, if any, a "significant gap" existed, and whether it was for AT&T Mobility or all wireless providers in the area, as well as AT&T Mobility not providing the least intrusive alternatives to the proposed tower, such as less sensitive site areas, alternate site designs and/or placement elsewhere other than the proposed site. (Def. Ex. D-1.)

AT&T Mobility appealed the decision of the ZHB by the filing of this action on July 5, 2006. (Docket Entry 1.) An Amended Complaint, which was filed on August 2, 2006, asserted the following four causes of action against the Township and ZHB:

- Count I: Prohibiting the provision of personal wireless services in violation of 47 U.S.C. § 332(c)(7)(B)(i)(II);
- Count II: Denial of variance relief in violation of the Pennsylvania Municipalities Planning Code, Section 910.2, 53 P.S. § 10910.2;
- Count III: Lack of substantial evidence supporting denial in violation of 47 U.S.C. § 332(c)(7)(B)(iii); and
- Count IV: Validity challenge to the Weisenberg Township Zoning Ordinance as *de facto* exclusionary.

(Docket Entry 6.)

AT&T Mobility submitted a Rule 16 Conference Information Report on January 4, 2007 alleging that Count I (Prohibition of Services Claim) and Count IV (Exclusionary Zoning Claim) of the Amended Complaint should be heard *de novo*. AT&T Mobility also requested an additional period of discovery with respect to both causes of action in order to allow submission

of additional proofs. On February 6, 2007, the Honorable Thomas M. Golden entered an Order allowing a limited period of additional discovery. (Docket Entry 14.)

On February 5, 2008, the Township moved for summary judgment on all counts of the Amended Complaint. (Docket Entry 24.) ZHB joined in the Township's motion for summary judgment. (Docket Entry 26.) By Order dated August 5, 2008, Judge Golden granted the Township's motion for summary judgment as to Counts II (Variance Claim) and III (Substantial Evidence Claim) of the Amended Complaint. (Docket Entry 29.)

On August 20, 2008, having obtained the consent of all parties in this case, Judge Golden ordered that this matter be transferred to this Magistrate Judge to conduct all further proceedings and order the entry of judgment in accordance with 28 U.S.C. § 636(c) and Rule 73 of the Federal Rules of Civil Procedure. (Docket Entry 30.) A non-jury trial was held before this Court on December 9, 10, 11, and 16, 2008 during which the parties presented evidence as further development of the record.⁶ (Docket Entries 56-59, 61-64.) On February 3, 2009, counsel presented closings and post-trial argument to the Court. (Docket Entries 67, 69.)

From the testimony at trial, exhibits and other matters of record, including the record before the ZHB, we make the following:

FINDINGS OF FACT

On November 10, 2004, AT&T Mobility submitted to the ZHB an application seeking zoning relief in the form of a variance in order to erect and operate a monopole telecommunications tower one hundred eighty feet (180') in height, accompanied by an

⁶ The Court notes that the evidence introduced at the trial of this matter was intended to further develop the record before the ZHB. This Court, prior to rendering this Memorandum, not only considered the evidence presented at trial, but also explicitly reviewed and considered the record before the ZHB.

equipment shed, on a leased parcel, known as the Bear Farm Property, in the Township.

(Amended Complaint ¶ 16.) The Bear Farm Property is a working farm which is considered an agricultural use under the Ordinance. (Amended Complaint ¶ 17.) At the time of the Plaintiff's amended zoning application, the Ordinance permitted communications towers by special exception in the Industrial Commercial Zoning District ("IC District") and the Business Commercial Zoning District ("BC District") in the Township. (Amended Complaint ¶ 11, Plaintiff's Trial Exhibit ("Pl. Ex.") P-12.) The combined area of the IC and BC districts⁷ consists of approximately three hundred acres of land along a narrow corridor adjacent to Interstate 78 ("I-78"). (N.T. 12/9/08 at 47, Pl. Ex. P-12.) The Bear Farm Property is not located in an IC or BC district. (Def. Ex. D-1.) At all times relevant hereto, the Ordinance also permitted communications antennas in every zoning district with a maximum height of twenty feet above existing structures. (Amended Complaint ¶ 12, Def. Ex. D-2.)

AT&T Mobility seeks to place the proposed telecommunications tower on the Bear Farm Property in order to remedy or fill what it perceives as a significant gap in cellular services for its customers both traveling through and residing within the Township. (Amended Complaint ¶ 13.) In an attempt to remedy this Gap, AT&T Mobility had the Township surveyed and examined. (N.T. 12/9/08 at 45-49.) At trial, AT&T Mobility considered the Gap to be located in the central portion of the Township, bounded as follows: Valley Road to the southeast of the gap down to Golden Key Road, which defines the southwest border of the gap, to Werleys Corner Road, which defines the western side of the gap, to Carpet Road, which defines the

⁷ The combined area of these zoning districts, when considering the approximately 17,155 acres that comprise the Township, accounts for approximately 1.8% of the Township. (Pl. Ex. P-12, Pl. Ex. P-78 at 14.)

northern border of the gap, back to Valley Road. (N.T. 12/9/08 at 127-128, 216, see also Pl. Ex. P-1, Def. Ex. D-3.)⁸ AT&T Mobility takes the position that not one of the five carriers⁹ servicing the Township adequately serves the area it asserts as the Gap. (N.T. 12/9/08 at 191, N.T. 12/10/08 at 29-57, Pl. Ex. P-55, Def. Ex. D-14.)

At trial, AT&T Mobility presented the testimony of Andrew M. Petersohn,¹⁰ a radio frequency engineer. Mr. Petersohn testified that a signal strength of -85 dBm¹¹ or better must consistently be present at the street level in order to provide a reliable signal for a wireless user traveling in a car. (N.T. 12/9/08 at 199-200.) Mr. Petersohn asserts that -85 dBm is the industry standard for providing reliable in-car service, and it is used by all the major carriers as the threshold design criterion for providing reliable in-car coverage. (N.T. 12/9/08 at 199.)

The -85 dBm signal strength is measured by the carriers at the street and not within the vehicle itself. (N.T. 12/9/08 at 200.) According to Mr. Petersohn, the actual signal

⁸ AT&T Mobility introduced, and this Court admitted, Exhibit P-1 over the objections of the Defendants. This exhibit, which consisted of a map of the Township, had a red colored polygon drawn in the center, which AT&T Mobility asserted identified the core of the Gap. (N.T. 12/9/08 at 189.) The Defendants objected on the basis that they had only received this drawing two weeks prior to trial and that it was not used in the proceeding before the ZHB. Defendants appeared to be correct on both grounds. The Court admitted the exhibit simply to allow AT&T Mobility to illustrate to the Court where it asserted that the core of the Gap exists. The Court does not find that the all of the area within the polygon constitutes the area in which AT&T Mobility is experiencing signal difficulty. (N.T. 12/9/08 at 40.)

⁹ The carriers, in addition to AT&T Mobility, are Verizon Wireless, T-Mobile, Sprint and Nextel.

¹⁰ Mr. Petersohn is qualified to testify on this subject. He obtained a Bachelor of Science degree in Electrical Engineering in 1999 from Lehigh University and a Masters of Engineering degree in 2005 from the same university. Mr. Petersohn is a registered professional engineer in the Commonwealth of Pennsylvania who has been working in the personal wireless industry for more than a decade. (N.T. 12/9/08 at 178-183.) Defendants had no objection to Mr. Petersohn being qualified as an expert in radio frequency engineering as it relates to personal wireless facilities. (N.T. 12/9/08 at 183.)

¹¹ “dBm” is used in the realm of radio frequency engineering as the standard way of defining received signal strength. (N.T. 12/9/08 at 200.) “dBm” is a logarithmic scale, as opposed to a linear scale, and it references the power of a milliwatt. (N.T. 12/9/08 at 200.)

inside the vehicle attenuates by 5 to 10 dB.¹² (N.T. 12/9/08 at 200.) By using -85 dBm at the street, therefore, the carrier can account for a fade margin caused by obstructions which may be encountered by the vehicle as it travels. (N.T. 12/9/08 at 202-203.) This margin between the signal at the street and the signal in the vehicle is what makes a signal strength of -85 dBm a reliable signal. (N.T. 12/9/08 at 204.) Because of the need for this margin of attenuation, Mr. Petersohn testified that a signal strength of less than -85 dBm provides unreliable signal strength in the environs of the Township. (N.T. 12/9/08 at 205, 207, 209.)

During his testimony, Mr. Petersohn discussed the results of the MobileNet Services, Inc. (“MobileNet”) drive test.¹³ MobileNet is an independent drive-testing company that was hired by the Township to conduct a drive test of the Township. (N.T. 12/9/08 at 220.) Mr. Petersohn, who conducted his own drive test of the Township, testified that he agreed with the methodology used by MobileNet in terms of measuring signal strength. (N.T. 12/9/08 at 222.) Based on his drive test,¹⁴ and the MobileNet drive test regarding signal strength, Mr. Petersohn identified the problem areas of the Township as including portions of Lyon Valley Road, Valley Road, Golden Key Road, Briar Edge Road, Edelweiss Road, Carpet Road, Tannery Road, Blacksmith Road, Bittners Hill Road, Holbens Valley Road, Smithville Road and Loghouse Road. (N.T. 12/9/08 at 223.) Some of these identified roads were located outside of what AT&T

¹² The term “dB” is used when describing the difference in signal strength between two “dBm” strength measurements. (N.T. 12/9/08 at 207.)

¹³ The MobileNet drive test was conducted on September 29, 2007. (Def. Ex. D-13.)

¹⁴ A drive test was also conducted on behalf of AT&T Mobility by Paul Dugan, a professional engineer. (N.T. 12/10/08 at 17.) According to Mr. Petersohn, the data derived from Mr. Dugan’s drive test was consistent with data obtained as a result of his drive test and that of MobileNet. (N.T. 12/10/08 at 21.)

Mobility considered to be the core of the Gap. (N.T. 12/9/08 at 223.) Mr. Petersohn testified that subscribers of AT&T Mobility would not be able to make and maintain a call of acceptable quality while traveling through the area identified as the Gap. (N.T. 12/9/08 at 226.)

Mr. Peterson also examined data from the MobileNet study regarding the quality of a voice transmission from a mobile unit to a land line phone or uplink. (N.T. 12/10/08 at 6.) This voice quality study was referred in the MobileNet report as the uplink MOS¹⁵ measurements.¹⁶ (Pl. Ex. P-33, Def. Ex. D-13.) This score is measured on a scale of 1 through 5. (N.T. 12/10/08 at 7.) Both Mr. Petersohn and MobileNet agree that a MOS measurement of 3.25 or greater is an adequate score for conducting a conversation. (N.T. 12/10/08 at 7.) Within the Gap, Mr. Petersohn testified that the number of areas which scored less than 3.25 on uplink¹⁷ for AT&T Mobility was 22 out of a total of 110 areas tested, or 20%. (N.T. 12/10/08 at 11, Pl. Ex. P-55.) Mr. Petersohn opined that this number was significant¹⁸ in that 20% of calls made in the Gap had bad voice quality. (N.T. 12/10/08 at 11-12.)

Based upon the data he derived from the aforementioned drive tests, Mr.

¹⁵ The acronym "MOS" is mean opinion score. (N.T. 12/10/08 at 5.)

¹⁶ Mr. Petersohn disagreed with MobileNet's method of testing call quality. (N.T. 12/10/08 at 12.) Mr. Petersohn noted that MobileNet conducted its test with the antenna placed on the top of the vehicle. (N.T. 12/10/08 at 12.) Although Mr. Petersohn agreed that an antenna on top of the vehicle was the correct method for measuring signal strength (N.T. 12/10/08 at 16), he opined that the antenna should be placed inside the vehicle for measuring MOS or adverse call events. (N.T. 12/10/08 at 13.) Mr. Petersohn explained that MobileNet's positioning of the antenna outside the vehicle for this particular test artificially creates a clearer path to the mobile phone. (N.T. 12/10/08 at 13.)

¹⁷ Mr. Petersohn testified that he used the uplink MOS measurements, as opposed to the downlink MOS measurements, because the uplink measurements represents the mobile phone trying to communicate back to the tower, and uplink is considered to be a weaker link when compared to downlink. (N.T. 12/10/08 at 10-11.)

¹⁸ Mr. Petersohn opined that the five percent (5%) is the uppermost acceptable standard for MOS. (N.T. 12/10/08 at 15.)

Petersohn opined that subscribers of Nextel (N.T. 12/10/08 at 31-37), Verizon (N.T. 12/10/08 at 38-44), Sprint (N.T. 12/10/08 at 45-50) and T-Mobile (N.T. 12/10/08 at 50-56), would not be able to rely on their ability to make, maintain and receive mobile calls of adequate voice quality while traveling through the area identified by Plaintiff as the Gap. (N.T. 12/10/08 at 57, 127.) Mr. Petersohn concluded that the Gap, which he defined as encompassing approximately five square miles, is significant for all providers servicing the Township.¹⁹ (N.T. 12/10/08 at 59, 65.)

AT&T Mobility also presented evidence of an inventory of existing barns and silos within the Township²⁰ in an effort to determine whether any of those structures were suitable sites for antennae that would provide adequate service to the asserted Gap area. (N.T. 12/9/08 at 45-49, N.T. 12/10/08 at 69.) Mr. Petersohn concluded that no suitable existing structures were present in the alleged Gap area.²¹ (N.T. 12/10/08 at 71, 74.) The Defendants presented no evidence to contradict this conclusion before the board or to the Court. (Def. Ex. D-1.)

Defendants presented the testimony of Oscar McKee,²² a wireless

¹⁹ In determining whether the Gap in question was significant, Mr. Petersohn stated that there were approximately twenty-two miles of roads within the Gap and, according to information obtained from the Pennsylvania Department of Transportation, some of the roads within the Gap area carry between 1,000 to 3,000 cars per day. (N.T. 12/10/09 at 63.)

²⁰ This information was gathered for the proceedings before the ZHB.

²¹ More specifically, Mr. Petersohn testified that the existing structures were too short and any antenna placed on the structures would not clear the local terrain. (N.T. 12/10/08 at 71.)

²² Mr. McKee is qualified to testify on this subject. He obtained a Bachelor of Science degree in Electrical Engineering in 1969 from the University of Missouri and a Masters of Science, Electrical Engineering degree in 1982 from Syracuse University. (N.T. 12/11/08 at 127, Def. Ex. D-11.) In addition, during his twenty years of service in the United States Air Force, most of his duties involved radio frequency. (N.T. 12/11/08 at 125-127.) Mr. McKee is a member of the Institute of Electrical and Electronics Engineers and the American Engineering Association. (N.T. 12/11/08 at 134, Def. Ex. D-11.) Since leaving the Air Force, Mr. McKee has continued working in the area of radio frequency as it relates to personal wireless facilities. (N.T. 12/11/08 at 128-134.) AT&T Mobility had no objection to Mr. McKee being qualified as a radio frequency expert. (N.T. 12/11/08 at 136.)

telecommunications consultant and owner of Ω-MC Signal Research Incorporated. (N.T. 12/11/08 at 124-125.) Prior to rendering his report and testimony, Mr. McKee directed MobileNet to conduct drive tests on every road in the Township in an effort to obtain as much information about the state of mobile wireless services from all of the providers within the Township. (N.T. 12/11/08 at 140.) Mr. McKee also reviewed the drive tests and report of AT&T Mobility's expert, Mr. Petersohn,²³ as well as the drive tests conducted by Paul Dugan. (N.T. 12/11/08 at 137.)

MobileNet provided data in four categories: retainability,²⁴ accessibility,²⁵ signal strength and MOS. (N.T. 12/11/08 at 142.) Based on the MobileNet report, Mr. McKee testified that the wireless provider with the strongest composite score²⁶ was Nextel. (N.T. 12/11/08 at 144.) With respect to Nextel, MobileNet attempted 142 calls of which 139 were successful initiations (97.89% accessibility) and 136 were completed (97.84% retainability). (N.T. 12/11/08 at 146, Def. Ex. D-13 at 4.) Nextel experienced three dropped calls and three no service calls. (N.T. 12/11/08 at 147, Def. Ex. D-13 at 4.) According to the MobileNet data, therefore, Nextel experienced 4.23% of adverse call events.²⁷ After reviewing the voice quality

²³ Mr. McKee took issue with the drive test of Mr. Petersohn on at least two grounds: (1) the test conducted by Mr. Petersohn was not extensive in that he did not drive a lot of the roads in the Township and (2) the test did not document adverse call events (N.T. 12/16/08 at 42, 48.)

²⁴ Retainability refers to those mobile calls which connected with the appropriate network and did not drop service. (N.T. 12/11/08 at 142, 145.)

²⁵ Accessibility refers to those mobile calls which made a connection with the appropriate network. (N.T. 12/11/08 at 143.)

²⁶ The composite score is a product of retainability, accessibility, voice quality, and signal strength. (N.T. 12/11/08 at 145, Def. Ex. D-13 at 2.)

²⁷ Nextel experienced six adverse call results out of the 142 calls made, or 4.23%. (Def. Ex. D-13 at 4.)

(MOS)²⁸ and signal strength results compiled by MobileNet for Nextel, Mr. McKee opined that there is no significant gap in coverage for Nextel in the Township. (N.T. 12/11/08 at 149-151, 208.)

Mr. McKee also provided detailed analysis with respect to AT&T Mobility. (N.T. 12/11/08 at 151-155.) With respect to AT&T Mobility, MobileNet attempted 140 calls of which 140 were successful initiations (100% accessability) and 139 were completed (99.29% retainability). (N.T. 12/11/08 at 151-152, Def. Ex. D-13 at 4.) AT&T Mobility experienced only one dropped call. (N.T. 12/11/08 at 147, Def. Ex. D-13 at 4.) According to the MobileNet data, therefore, AT&T Mobility experienced .71% of adverse call events.²⁹ After reviewing the voice quality (MOS) and signal strength results compiled by MobileNet for AT&T Mobility, Mr. McKee opined that there is no significant gap in coverage for AT&T Mobility in the Township.³⁰

²⁸ The MOS measurements for both the uplink (phone to tower) and downlink (tower to phone) were in excess of 3.25, which both experts indicated was an acceptable score for voice quality. (N.T. 12/10/08 at 7, N.T. 12/11/08 at 149.) However, Mr. McKee also opined that it was still possible to make, maintain and receive wireless calls even when the MOS downlink measurement was between 2.85 and 3.25. (N.T. 12/11/08 at 166-167.) Mr. McKee agreed with Mr. Petersohn that the uplink MOS was weaker than the downlink. (N.T. 12/11/08 at 170.) Mr. McKee, however, offered certain actions which might be taken to optimize or improve this condition. (N.T. 12/11/08 at 171-173, 174.) He could not state whether AT&T Mobility pursued any optimization, and only mentioned that he did not hear Mr. Petersohn testify that any optimization alternatives were pursued. (N.T. 12/11/08 at 173.) Nonetheless, Mr. McKee opined that the data regarding AT&T Mobility's fixed end uplink MOS had no impact on the ability to make or receive a call and was not consistent with the presence of a significant gap in its network. (N.T. 12/11/08 at 176.)

²⁹ AT&T Mobility experienced one adverse call result out of the 140 calls made, or .71%. (Def. Ex. D-13 at 4.)

³⁰ In rendering his decision as to the reliability of the AT&T Mobility network, Mr. McKee also discussed the concept of RXQUAL measurements. (N.T. 12/11/08 at 176-182.) RXQUAL measured the bit air rate. (N.T. 12/11/08 at 176-177.) He explained that as the signal gets weaker, the quality of the voice transmission deteriorates, which effects the ability to make or maintain a call. (N.T. 12/11/08 at 177.) Mr. McKee opined that RXQUAL is a very important measurement in determining whether a tower site is needed. (N.T. 12/11/08 at 177, 180.) RXQUAL is measured on a scale of 0 to 7, with 0 being the best score and 7 the poorest. (N.T. 12/11/08 at 177.) Mr. McKee opined that, based on his professional experience, a score as low as 4 or 5 is acceptable in the wireless industry. (N.T. 12/11/08 at 178.) He further testified that the RXQUAL for AT&T Mobilty within the drive test area was very good. (N.T. 12/11/08 at 180.) Although he did find some areas of weakness, he indicated they were not over a broad area. (N.T. 12/11/08 at 181.) His ultimate opinion was that AT&T Mobility did not have

(N.T. 12/11/08 at 154-155, 163-164, 208.) In fact, Mr. McKee opined that AT&T Mobility's experiencing only one dropped call over the span of a fourteen hour drive test covering ninety-one miles (the extent of the MobileNet test) was indicative of an outstanding network. (N.T. 12/11/08 at 162.)

With respect to the Sprint network, Mr. McKee noted that MobileNet attempted 146 calls of which 146 were successful initiations (100% accessibility) and 144 were completed (98.63% retainability). (N.T. 12/11/08 at 155-156, Def. Ex. D-13 at 4.) With respect to adverse call events, Sprint experienced only two dropped calls. (N.T. 12/11/08 at 156, Def. Ex. D-13 at 4.). According to the MobileNet data, therefore, Sprint experienced 1.37% of adverse call events.³¹ (N.T. 12/11/08 at 156.) After reviewing the voice quality (MOS) and signal strength results compiled by MobileNet for Sprint, Mr. McKee opined that there is no significant gap in coverage for Sprint in the Township. (N.T. 12/11/08 at 157-158, 191-192, 194, 208.)

Mr. McKee disagreed with AT&T Mobility's expert, Mr. Petersohn, as to whether -85 dbm was an industry standard for signal strength. (N.T. 12/11/08 at 185.) In fact, Mr. McKee explicitly stated that -85 dBm has not been established as the standard for adequate or reliable coverage by any organization or standards body. (N.T. 12/11/08 at 185-186.) Moreover, it was his opinion that calls could be made, received and maintained while traveling through the

a significant gap in service and its customers could make and maintain wireless calls within the asserted Gap area. (N.T. 12/11/08 at 180-182.)

³¹ Sprint experienced two adverse call results out of the 146 calls made, or 1.37%. (Def. Ex. D-13 at 4.)

Township in a car with a street level signal strength of -95 dbm.³² (N.T. 12/11/08 at 186-187, 189.)

Although Mr. McKee opined that no significant gap in coverage existed for the Township, he did note that there was an area, consisting of about one half of a mile,³³ located within the asserted Gap at the junction of Carpet and Tannery Roads which experienced a weaker signal strength for Sprint,³⁴ Nextel,³⁵ and AT&T Mobility. (N.T. 12/11/08 at 199, N.T. 12/16/08

³² Mr. McKee explained that in determining whether a signal strength of -95 dbm was adequate to make and maintain calls, it depends on the terrain of the area. For example, in Manhattan, an area with tall buildings and deep canyons, -95 dbm would not provide an adequate signal. (N.T. 12/11/08 at 188.)

³³ In estimating the size of this area of weaker signal strength, Mr. McKee testified that he would be surprised if the area comprised as much as a half a mile. (N.T. 12/16/08 at 19.)

³⁴ Mr. McKee's testimony in this regard was as follows:

Q. And what is your opinion of Sprint signal strength within the alleged gap area?

A. I think for the most part a person would be able to hold -- and make and hold a call of course in that area. I would think it would drop right there.

Q. Now, when you -- let me just correct. When you say right there, can you identify that for the record?

A. I'm sorry, yes. Along the Tannery Road and Carpet before -- you know, right -- I can't gauge the distance from here, but the distance looks long enough that if you were on a call and drop it, then you would have a trouble initiating a call there.

(N.T. 12/11/08 at 200.)

³⁵ Mr. McKee's testimony in this regard was as follows:

Q. Do you see a drop call and a no-service indication in the area that is the intersection of Tannery Road and Carpet Road?

A. Well, not to correct you but it's after -- it looks like it's after the intersection --

Q. To the west or to the east?

A. To the west. And the drop call is at -- what I think is Carpet Road and a road going almost due north. And then there's a no service indicator slightly to the west of that on Carpet Road. And then there's another one slightly further west on Carpet Road?

* * *

Q. And, again, just based on what you see in front of you as far as this plot by Millennium Engineering, in your opinion, as to a reasonable degree of scientific probability, does Nextel provide reliable wireless service within that gap area,

at 8, 10.) It was Mr. McKee's opinion, however, that this weaker signal strength, particularly in the area of Carpet and Tannery Roads,³⁶ did not create a significant gap. (N.T. 12/11/08 at 201.)

One of the major differences in the opinions rendered by Mr. Petersohn and Mr. McKee was that Mr. Petersohn opined that a signal strength of signal strength of -85 dbm *at street level outside of a vehicle* was necessary to maintain consistent reliable wireless service, while Mr. McKee was of the opinion that such reliable service would exist at -95 dbm. (N.T. 12/16/08 at 7 - 11.) Despite this difference in opinion, Mr. McKee did admit that there were areas where the signal was -95 dbm or less, including the area at the intersection of Tannery Road and Carpet Road. (N.T. December 14, 2008, p. 11, 19, see also Def. Ex. D-13, last page.) He further stated that "[t]he only weak area is that small area around the intersection of Carpet Road and Tannery Road, and maybe Blacksmith Road a little bit. That's the weakest area." (N.T. 12/16/08 at 18, see also Def. Ex. D-13, last page.) It was Mr. McKee's opinion that Nextel and AT&T Mobility had the strongest signals in that area and that Sprint's signal was not as strong but had a reasonable expectation of "good quality service." (N.T. 12/16/08 at 20.)

just based on what you see here?

A. I want to make sure I'm very clear on what you said.. Just in the gap area?

You mean the large triangle that we've seen before?

Q. Correct.

A. I would still say that in the main -- in that large area that they have depicted with that large polygon, it actually was. I still say they have good coverage. Just one weak area around Carpet Road.

(N.T. 12/11/08 at 201-202, N.T. 12/16/08 at 30-31.)

³⁶ Mr. McKee opined that the concentration of adverse call events occurred in at or near the intersection of Carpet and Tannery Roads. (N.T. 12/16/08 at 58.)

DISCUSSION

Prohibition of Services Claim

AT&T Mobility asserts that the ZHB's denial of its variance application to erect a personal wireless facility in Weisenberg Township resulted in a prohibition of services in violation of 47 U.S.C. §332(c)(7)(B)(i)(II). While the TCA preserves the authority of local governments to regulate land use within their municipality, it also places limits on the ability of local authorities to regulate and control the expansion of telecommunications technologies. *Omnipoint Communications Enters. v. Zoning Hearing Bd. of Eastown Township*, 331 F.3d 386, 396 (3d Cir. 2003). In particular, local government regulation "shall not prohibit or have the effect of prohibiting the provision of person wireless services. . . ." 47 U.S.C. §332(c)(7)(B)(i)(II).

In order for AT&T Mobility to establish a violation of this section of the TCA, the United States Court of Appeals for the Third Circuit has determined that it must establish (1) that there is a significant gap in the ability of remote users to access the national telephone network and (2) that the proposed facility is the least intrusive means of remedying that gap. *APT Pittsburgh Limited Partnership v. Penn Township*, 196 F.3d 469, 480 (3d Cir. 1999).

First, the provider must show that its facility will fill an existing significant gap in the ability of remote users to access the national telephone network. In this context, the relevant gap, if any, is a gap in the service available to remote users. Not all gaps in a particular provider's service will involve a gap in the service available to remote users. The provider's showing on this issue will thus have to include evidence that the area the new facility will serve is not already served by another provider.

Second, the provider applicant must also show that the manner in which it proposes to fill the significant gap in service is the least

intrusive on the values that the denial sought to serve. This will require a showing that a good faith effort has been made to identify and evaluate less intrusive alternatives, e.g., that the provider has considered less sensitive sites, alternative system designs, alternative tower designs, placement of antennae on existing structures, etc.

Omnipoint, 331 F.3d at 397-398, *citing*, *Penn Township*, 196 F.3d at 480 (footnote omitted).

We reiterate, with respect to the first prong, that because the “relevant gap” in the significant gap inquiry is a “gap in the service available to remote users,” AT&T Mobility must “include evidence that the area the new facility will serve is not already served by another provider.” *Penn Township*, 196 F.3d at 480. The Third Circuit has further explained that a significant gap in wireless services exists “when a remote user of those services is unable either to connect with the land-based national telephone network, or to maintain a connection capable of supporting a reasonably uninterrupted communication.” *Cellular Telephone Co. v. Zoning Bd. of Adjustment of the Borough of Ho-Ho-Kus*, 197 F.3d 64, 70 (3d Cir. 1999).

As the Honorable Jan E. DuBois noted in *American Cellular Network Co. v. Upper Dublin Township*,

Cases in this Circuit evaluating whether a cellular provider has established a ‘significant gap’ demonstrate that determining whether a gap in service is significant involves at least two sub-questions. The first question is a qualitative one. The Court must ask: has the cellular provider established that the quality of cellular service is sufficiently poor so as to rise to the level of a ‘significant’ gap? *See Omnipoint Communications Enterps. v. Zoning Hearing Bd. of Easttown Township*, 189 F. Supp. 2d 258, 263-65 (E.D. Pa. 2002) (Hart, M.J.) (analyzing number of dropped calls, instances of no service, and signal strength); *Cellular Tel. Co. v. Zoning Bd. of Adjustment of Harrington Park*, 90 F. Supp. 2d 557, 565 (D.N.J. 2000) (analyzing percentage of dropped calls). The second question relates to the scope of the gap - that is, how many users are affected by the gap, or how large an area is in the

gap. The Court must ask: has the cellular provider established that the purported gap in service affects a large enough number of users so as to constitute a 'significant' gap? *See Ho-Ho-Kus*, 197 F.3d at 70 n.2 (noting that 'it matters a great deal...whether the 'gap' in service merely covers a small residential cul-de-sac or whether it straddles a significant commuter highway or commuter railway') . . .

American Cellular, 203 F. Supp. 2d 383, 389 (E.D. Pa. 2002).

As noted above, cases in this Circuit have primarily focused on adverse call events, i.e. dropped calls, no service indicators, etc., in determining whether a significant gap exists. *See American Cellular*, 203 F. Supp. 2d 383, 389 (E.D. Pa. 2002)(DuBois, J.) (analyzing call failure rate), *Omnipoint*, 189 F. Supp. 2d 258, 263-65 (E.D. Pa. 2002) (Hart, M.J.) (analyzing number of dropped calls, instances of no service, and signal strength); *Harrington Park*, 90 F. Supp. 2d 557, 565 (D.N.J. 2000) (analyzing percentage of dropped calls).³⁷ We see no reason to

³⁷ The *Omnipoint* and *Harrington Park* cases were succinctly summarized by the Court in *American Cellular*. More specifically, Judge Dubois noted that

In [*Omnipoint*], Judge Hart considered the expert report of Paul Dugan, a radio frequency engineer for the cellular provider, Omnipoint. In a drive test similar to that conducted by Hettler in this case, but on different roadways, Dugan tested eight service providers. In the test, approximately eighty calls were made on each telephone. Looking to the number of 'dropped calls' and 'instances where there was no service,' the court stated Dugan's test showed that out of eighty calls made on Omnipoint's service, there were eleven dropped calls and thirteen instances of no service - a thirty percent failure rate. In sharp contrast, of the 560 calls made with the other seven providers' phones, only eleven calls, or 1.96% of all calls on the other providers' phones, experienced service problems. This evidence, the court concluded, showed 'that only one provider, Omnipoint, was incapable of providing reliable service to its customers.' Because the significant gap inquiry requires a showing that all providers experience a gap in service, the court held that Omnipoint's claim under the TCA's 'effect of prohibiting' provision failed (footnote omitted).

Harrington Park is the second case involving a similar analysis. In that case, where Cellular Telephone Co. d/b/a AT&T Wireless sought zoning approval for a cellular site in the borough of Harrington Park, testimony established that 'five to seven percent of the calls placed in this area are lost.' The court rejected the defendant Zoning Board's argument that this evidence did not establish a significant gap. Rather, 'given the Telecommunications Act's twin goals of

depart from this standard. Further, we note that the Court in *American Cellular* concluded that “a line of demarcation falling somewhere between 1.96% and five-to-seven percent [of failed calls] is a reasonable interpretation of the TCA” in determining whether a significant gap exists. *American Cellular*, 203 F. Supp. 2d at 394.

Mr. Petersohn testified that a signal strength of -85 dBm, which he identified as the industry standard for reliable in-car coverage, or better must consistently be present at the street level in order to provide a reliable signal for a wireless user traveling within the Township. (N.T. 12/9/08 at 199-200.) Mr. McKee, however, explicitly stated that -85 dBm has not been established as the standard for adequate or reliable coverage by any organization or standards body. (N.T. 12/11/08 at 185-186.) Moreover, it was his opinion that calls could be made, received and maintained while traveling through the Township in a car with a street level signal strength of -95 dbm. (N.T. 12/11/08 at 186-187, 189.) Based on the evidence presented at trial, this Court concludes that AT&T Mobility has failed to establish that -85 dBm is an industry standard for reliable service. *See also Omnipoint Communications Enters. v. Zoning Hearing Bd. of Eastown Township*, 189 F. Supp. 2d 258, 264 (E.D. Pa. 2002).

encouraging rapid deployment of new technologies and providing nationwide seamless cellular service to the public,’ the court concluded ‘that a loss of five to seven percent is a significant gap.’

American Cellular, 203 F. Supp. 2d at 393-394 (citations omitted).

As indicated above, courts in this Circuit have routinely analyzed the percentage of adverse call results in determining whether a significant gap exists.³⁸ In accordance with the analysis conducted in prior cases, this Court must rely on the statistics provided by MobileNet to determine whether a significant gap exists.³⁹ MobileNet specifically documented adverse call results both in its drive test and in its report. Mr. Petersohn's drive test, however, did not contain any data concerning adverse call results.⁴⁰ Given the clear precedent in this Circuit, this Court is unsure why AT&T Mobility failed to focus more explicitly on adverse call results.

We note that AT&T Mobility plotted the adverse call results of MobileNet on one of its trial exhibits in an effort to set forth the percentage of adverse call events which occurred within the Gap and outside of the Gap. *See* Pl. Ex. P-61. In so doing, AT&T Mobility indicated that, combined, the wireless providers in the Township experience 22.6% of adverse call events within the Gap. (Pl. Ex. P-61.) While this 22.6% would appear to qualify as a significant gap based on percentages identified in prior cases, i.e. *American Cellular*, an aggregate approach is

³⁸ Defendant's expert, Mr. McKee, agreed that information with respect to adverse call events is essential in determining whether a significant gap exists in wireless service. (N.T. 12/16/08 at 48.) Although both experts discussed voice quality as being an important factor in wireless services, it was not necessarily one of the factors analyzed by prior courts in ascertaining whether a significant gap is present, which, as stated above, exists "when a remote user of those services is unable either to connect with the land-based national telephone network, or maintain a connection capable of supporting a reasonably uninterrupted communication." *Ho-Ho-Kus*, 197 F.3d at 70.

³⁹ During trial, AT&T Mobility presented testimony in an effort to undermine the methods employed by MobileNet in conducting its drive test of the Township. (N.T. 12/10/08 at 13, 20, 22-23, 26, 108-109, 119, 120-121, 122-123.) If AT&T Mobility realized that MobileNet's testing methods would produce more favorable results in terms of showing reliable coverage, it was up to AT&T Mobility to correct this proof problem. *See Omnipoint*, 189 F. Supp. 2d at 264 n.4. As the record stands, we are unable to decipher the percentage of adverse call results for each provider from the data submitted by AT&T Mobility in this case.

⁴⁰ Although we note that the drive tests conducted by Paul Dugan, on behalf of AT&T Mobility, did contain data concerning adverse call results (Pl. Ex. P-34, P-41, P-46, P-50, P-54), the Court was unable to decipher the percentage of failed calls because the data was not displayed numerically as it was in the MobileNet report. (Def. Ex. D-13 at 4.) We note that the burden is on AT&T Mobility to establish a significant gap in coverage.

inconsistent with the rule in this Circuit. *See Omnipoint*, 331 F.3d 399-400 (rejecting plaintiff's argument that the existence of a significant gap must include data from all providers). AT&T Mobility's failure to separate out the percentage of adverse call events for each provider is suspect given the Court's determination below.

MobileNet attempted 142 calls on the Nextel network of which 139 were successful initiations (97.89% accessibility) and 136 were completed (97.84% retainability). (N.T. 12/11/08 at 146, Def. Ex. D-13 at 4.) Throughout the Township, Nextel experienced three dropped calls and three no service calls. (N.T. 12/11/08 at 147, Def. Ex. D-13 at 4.) According to the MobileNet data, therefore, Nextel experienced 4.23% of adverse call events. With respect to AT&T Mobility, MobileNet attempted 140 calls of which 140 were successful initiations (100% accessibility) and 139 were completed (99.29% retainability). (N.T. 12/11/08 at 151-152, Def. Ex. D-13 at 4.) AT&T Mobility experienced just one dropped call. (N.T. 12/11/08 at 147, Def. Ex. D-13 at 4.) As a result, AT&T Mobility experienced only .71% of adverse call events. Finally,⁴¹ MobileNet's drive test results of the Sprint network demonstrated that 146 calls were attempted of which 146 were successful initiations (100% accessibility) and 144 were completed (98.63% retainability). (N.T. 12/11/08 at 155-156, Def. Ex. D-13 at 4.) With respect to adverse call events, Sprint experienced two dropped calls. (N.T. 12/11/08 at 156, Def. Ex. D-13 at 4.) According to the MobileNet data, therefore, Sprint experienced 1.37% of adverse call events.

⁴¹ This Court notes that there are two other providers servicing the Township. These providers, Verizon and T-Mobile, experienced the worst percentages of adverse call results at 10.39% and 33.02%, respectively. (Def. Ex. D-13 at 4.) However, even if the MobileNet data shows that these providers are incapable of providing reliable service to their customers in the Township, such a showing does not satisfy the *Penn Township* burden. *See Omnipoint*, 189 F. Supp. 2d at 265, *citing*, *Penn Township*, 196 F.3d at 480 (it is necessary for a "provider to show more than it was denied an opportunity to fill a gap in its service system.")

Only .71% of AT&T Mobility's customers and 1.37% of Sprint's customers experience service problems while traveling through the Township. Both of these percentages fall well below the line of demarcation that was set forth by the Court in *American Cellular*. *American Cellular*, 203 F. Supp. 2d at 394 ("somewhere between 1.96% and five-to-seven percent [of failed calls] is a reasonable interpretation of the TCA"). This evidence shows, in accordance with the cases in this Circuit, that AT&T Mobility, Sprint, and, quite possibly, Nextel, are capable of providing reliable service to their customers and there is no significant gap in the Township.⁴² Because the significant gap inquiry requires a showing that *all* providers experience a gap in service, this Court finds that AT&T Mobility's claim under the TCA's "effect of prohibiting" provision fails. *See Omnipoint*, 189 F. Supp. 2d at 265, *citing*, *Penn Township*, 196 F.3d at 480.

Exclusionary Zoning Claim

AT&T Mobility challenges the substantive validity of the Ordinance on the grounds that it is allegedly *de facto* exclusionary by effectively precluding telecommunications towers within the Township. It is a well established general rule that one who attacks the validity

⁴² In determining that no significant gap exists, this Court has considered the testimony of Mr. McKee with respect to the area, consisting of about one half of a mile, around the intersection of Tannery and Carpet Roads. (N.T. 12/11/08 at 11, 19, 199, N.T. 12/16/08 at 8, 10, *see also* Def. Ex. D-13, last page.) The Court concludes, based on all of the evidence, that even if a gap in service existed in this area, it covers an area too small and affects too few to be considered significant.

The TCA does not require that wireless services provide one hundred percent (100%) coverage in a given area, and in recognition of this, federal regulations contemplate the existence of "dead spots" defined as "small areas within a service area where the field strength is lower than the minimum level for reliable service." 47 C.F.R. § 22.99. With regard to calculating the cellular geographic service area, regulations provide that cellular service is considered to be provided in all areas, including dead spots. 47 C.F.R. § 22.911(b). *See generally Charlottesville v. Board of Supervisors of Albemarle County*, 211 F.3d 79, 87 (4th Cir. 2000), *citing*, *Sprint Spectrum, L.P. v. Willoth*, 176 F.3d 630, 643-644 (2d Cir. 1999)(recognizing that denials of applications to provide service to fill coverage gaps that are limited in number or size generally will not amount to a prohibition of service.)

of a zoning ordinance has the burden of overcoming a strong presumption in favor of the ordinance. *See, e.g., Macioce v. ZHB of Borough of Baldwin*, 850 A.2d 882, 887 (Pa. Cmwlth. 2004) (holding that a zoning ordinance was not *de facto* exclusionary based only on the fact that it permitted wireless telecommunications towers on only one percent (1%) of borough land). Even if an ordinance is not totally exclusionary on its face, it may be *de facto* exclusionary if it does not provide a “fair share” of the total available land within the municipality for a particular use. *Sprint Spectrum L.P. v. ZHB of Mahoning Township*, 46 Pa. D. & C. 4th 187, 192, *citing*, *Jim Thorpe Area School District v. Kidder Twp. ZHB*, 42 D. & C. 4th 432 (1999).

The fair share doctrine requires “local political units to plan for and provide land use regulations which meet the legitimate needs of all categories of people who may desire to live within its boundaries.” *Surrick v. ZHB of Upper Providence Township*, 382 A.2d 105, 108 (Pa. 1977). Thus, under Pennsylvania law, *de jure* exclusion exists where an ordinance, on its face, totally bans a legitimate use, while *de facto* exclusion exists where an ordinance permits a use on its face, but when applied, acts to prohibit the use throughout the municipality. *Macioce*, 850 A.2d at 888, *citing*, *Penn Township*, 196 F.3d at 475 (3d Cir. 1999). The aforementioned “fair share” principle applies when an ordinance only partially excludes a land use.⁴³ *Omnipoint*, 331 F.3d at 394. An ordinance is exclusionary when a municipality fails to provide for its “fair share” of a legitimate land use, such as multi-family dwellings. *Id.*

⁴³ In *Surrick*, the Pennsylvania Supreme Court articulated several factors to be considered in applying the “fair share” principle in the housing context: (1) whether the area is a logical area for development and population growth; (2) the present level of development; (3) population density data; (4) the percentage of total undeveloped land; and (5) the percentage of undeveloped land available for development. *Surrick*, 382 A.2d at 110.

The Third Circuit identified the relevant inquiry as whether the wireless provider has carried its “heavy burden” of showing that the needs of the community’s residents for wireless services are not being adequately served. *Omnipoint*, 331 F.3d at 394, *citing*, *Montgomery Crossing Assoc. v. Township of Lower Gwynedd*, 758 A.2d 285, 289 (2000) ; *Schubach v. Silver*, 336 A.2d 328, 335 (Pa. 1975). To overcome the presumption that the Ordinance is constitutional, AT&T Mobility must show that there is a causal link between the area of land zoned for the use and the community residents’ inability to meet their needs. *Omnipoint*, 331 F.3d at 394. AT&T Mobility has failed to do so.

At the time AT&T Mobility’s application was denied, communications towers were permitted, by special exception, in the BC and IC districts.⁴⁴ (Pl. Ex. P-12, Pl. Ex. P-78 at 12, Def. Ex. D-2.) The BC and IC districts were located adjacent to I-78 and comprised about 1.8% of the total Township area. (Pl. Ex. P-12, Pl. Ex. P-78 at 14.) Communication antennas attached or mounted on existing public utility transmission towers, existing communication towers and existing buildings or structures and communications equipment buildings are also permitted uses by right in all zoning districts within the Township, and are permitted to exceed the maximum height limitations by up to twenty feet. (Def. Ex. D-2.)

⁴⁴ The Ordinance that was in effect at the time of the denial of AT&T Mobility’s request for a variance has been subsequently amended. (N.T. 12/9/08 at 121-123, N.T. 12/10/08 at 215-220, 222-224.) The change relevant to these proceedings involves the permitted placement of communications towers. Under the new ordinance, communications towers are permitted within the General Industrial (“GI”) (the former IC district) and Light Industrial (“LI”) (the former BC district) zoning districts. (N.T. 12/9/08 at 121-122, N.T. 12/10/08 at 220-221.) Communications towers are permitted up to 220 feet by right in the GI zone and up to 150 feet by special exception in the LI zone. (N.T. 12/9/08 at 122-123, N.T. 12/10/08 at 220.) The former IC district, now referred to as the GI district, has also been expanded. (N.T. 12/9/08 at 123.)

For the purposes of AT&T Mobility’s exclusionary zoning claim, this Court will consider the Ordinance that was in effect at the time of AT&T Mobility’s denial of its variance request. *See Omnipoint*, 189 F. Supp 2d at 267 (focusing on the regulations in effect at the time plaintiff’s variance request was made).

Based on the findings set forth above, the Court concludes that AT&T Mobility has not carried its heavy burden of showing that the personal wireless services needs to the Township's residents are not being served. As noted above, this Court does not find that the evidence presented by AT&T Mobility supports its assertion that wireless users in the Township are unable to connect with the land-based national telephone network or maintain a connection capable of supporting reasonably uninterrupted communication. According to the statistics presented with respect to adverse call results, AT&T Mobility and Sprint experience service problems only .71% and 1.37% of the time, respectively, within the Township. As a result, AT&T Mobility has failed to establish that the Township residents or commuters suffer a negative impact as a result of the Ordinance. *See Omnipoint*, 189 F. Supp. 2d at 269-270. Accordingly, the Court finds that the Ordinance is neither *de facto* exclusionary nor in violation of the Constitution of the State of Pennsylvania.⁴⁵

CONCLUSIONS OF LAW

This Court concludes that the ZHB's denial of AT&T Mobility's variance application to erect a personal wireless facility in Weisenberg Township did not result in a prohibition of services in violation of 47 U.S.C. §332(c)(7)(B)(i)(II). AT&T Mobility has not carried its heavy burden of showing that the personal wireless services needs to the Township's residents are not being served. As noted above, this Court concludes that a significant gap in wireless services does not exist within the Township. In addition, this Court concludes that the

⁴⁵ Because the Ordinance in effect at the time of the denial of AT&T Mobility's request for a variance was somewhat more restrictive (in terms of the permitted placement, by special exception, of telecommunications towers) than the ordinance currently in effect, we would likewise conclude the new ordinance is neither *de facto* exclusionary nor in violation of the Constitution of the State of Pennsylvania.

Ordinance is neither *de facto* exclusionary nor in violation of the Constitution of the State of Pennsylvania. Accordingly, this Court finds in favor of Defendants, Zoning Hearing Board of Weisenberg Township and Weisenberg Township and enters judgment of behalf of Defendants.⁴⁶ An appropriate Order follows.

⁴⁶ At the close of AT&T Mobility's case-in-chief, counsel for Defendants made an oral motion for judgment on partial findings pursuant to Rule 52(c) of the Federal Rules of Civil Procedure. (N.T. 12/11/08 at 96-103.) Rule 52(c) provides, in pertinent part, as follows:

If a party has been fully heard on an issue during a nonjury trial and the court finds against the party on that issue, the court may enter judgment against the party on a claim or defense that, under the controlling law, can be maintained or defeated only with a favorable finding on that issue. The court may, however, decline to render any judgment until the close of the evidence.

Fed.R.Civ.P 52(c). As permitted by Rule 52(c), this Court declined to render judgment until the close of all evidence. (N.T. 12/11/08 at 103.) In accordance with the findings and conclusions now set forth above, this Memorandum, as well as the Order which follows, dispose of Defendants' motion.